What is claimed:

1. A method of encapsulating a chemical agent comprising:

(a) combining, in an aqueous solvent, particles of a chemical agent suspended in the aqueous solvent and an encapsulation effective amount of a first encapsulating agent; and

(b) converting the first encapsulating agent to an encapsulating polymer, thereby forming encapsulated particles of the chemical agent.

2. The method of claim 1, wherein the converting of step (b) is:

(i) where the first encapsulating agent is a polymer, changing the pH of the aqueous solvent to precipitate the polymer; or

(ii) where the first encapsulating agent comprises water-dispersible oligomers, polymers, or mixtures thereof, forming the precipitated polymer from the encapsulating agent.

3. The method of claim 2, wherein the converting is according to (ii) and the converting process further comprises heating the combined particles and first encapsulating agent to at least about 40° C.

4. The method of claim 3 wherein the encapsulating polymer is selected from the group consisting of: ureformaldehyde resin, melamine formaldehyde resin, phenol formaldehyde resin, resorcinol formaldehyde resin, butylated urea formaldehyde resin, polyisocyanate, glycoluril formaldehyde resin, and poly(methylolacrylamide).

5. The method of claim 4 wherein the polyisocyanate comprises residues derived from an alkylene diisocyanate.

6. The method of claim 5 wherein the alkylene diisocyanate is hexamethylene diisocyanate.

7. The method of claim 2, wherein the converting is according to (ii) and wherein the first encapsulating agent forms an encapsulating polymer selected from the group consisting of: polyisocyanates, formaldehyde copolymers, a polyacrylamide, and phenoxy resin.

8. The method of claim 2, wherein the converting is according to (i) and the method further comprises:

(c) reacting the encapsulating polymer with a first curing agent.

9. The method of claim 8, wherein reacting comprises heating to a temperature of at least 40° C.

10. The method of claim 8 wherein the first curing agent is an inorganic or organic salt having a multivalent cation.

11. The method of claim 10 wherein the first curing agent is selected from the group consisting of: calcium chloride, calcium carbonate, magnesium chloride, calcium lignosulfonate, calcium alkylbenzene sulfonate, and calcium stearate.

12. The method of claim 11 wherein the first curing agent is calcium lignosulfate.

13. The method of claim 9 wherein the first curing agent is selected from the group consisting of: diamines, silanes, aldehydes, polyhydroxides, epoxides, diepoxides, or water soluble amino resins.

14. The method of claim 13 wherein the first curing agent is formaldehyde.

15. The method of claim 8 further comprising:

(d) combining the encapsulated particles of step (c) with a second encapsulating agent.

16. The method of claim 15, further comprising heating the combination of step (d) to a temperature of at least about 40° C.

17. The method of claim 15 wherein the second encapsulating agent forms a second encapsulating polymer selected from the group consisting of: formaldehyde copolymers, polyisocyanates, a polyacrylamide, and phenoxy resin.

18. The method of claim 17 wherein the second encapsulating polymer is selected from the group consisting of: ureformaldehyde resin, melamine formaldehyde resin, polyisocyanates, phenol formaldehyde resin, resorcinol formaldehyde resin, butylated urea formaldehyde resin, glycoluril formaldehyde resin, and methylolacrylamide.

19. The method of claim 18 wherein the polyisocyanate comprises residues derived from an alkylene diisocyanate.

20. The method of claim 19 wherein the alkylene diisocyanate is hexamethylene diisocyanate.

21. The method of claim 1, wherein the particles have an size ranging from about 1μm to about 100μm.

22. The method of claim 1, wherein the viscosity of the suspension does not significantly increase during the converting of step (b).

23. The method of claim 1 wherein the converting is effected by lowering the pH of the aqueous solvent.

24. The method of claim 23 wherein the first encapsulating agent is a polymer selected from the group consisting of: polyanhydrides, polyanhydride acids, polyanhydride salts, polyanhydride esters, styrene maleic anhydride copolymers and hydrolysis and neutralization products thereof, polysaccharides, acrylic acid polymers, polyacrylamides, acrylic polymers, hydrophobically-modified polyacrylic acids, and salts of alkyl naphthalene sulfonate polymers.

25. The method of claim 24 wherein the first encapsulating agent is selected from the group consisting of: maleic anhydride copolymer disodium salt, styrene maleic anhydride copolymer amide ammonium salt, styrene maleic anhydride copolymer ammonium salt, poly(methyl vinyl ether-*co*-maleic anhydride), N-methylolacrylamide, and poly(vinyl chloride-*co*-vinyl acetate-*co*-hydroxyl acrylate).

26. The method of claim 23 wherein the pH is lowered by adding an acid selected from the group consisting of: hydrochloric acid, hydrobromic acid, hydroiodic acid, sulfuric acid, perchloric acid, phosphoric acid, acetic acid, trifluoroacetic acid, citric acid, and 2,2,2-trifluoroethanol.

27. The method of claim 26 wherein the acid is acetic acid.

28. The method of claim 1 wherein the chemical agent is a bioactive agent.

29. The method of claim 28 wherein the bioactive agent is a pesticide.

30. The method of encapsulating a chemical agent according to claim 2 wherein the converting is according to (ii) and the change in pH is a decrease in pH, effected by addition of acid, to less than about 6 and further comprising adding a curing agent, which is a calcium salt, and heating the resulting mixture to a temperature above about 40° C.

31. The method of claim 30 further comprising the steps of combining the product of claim 31 with a water-dispersible polyisocyanate based on hexamethylene diisocyanate and heating the resulting combination to a temperature above about 40° C.